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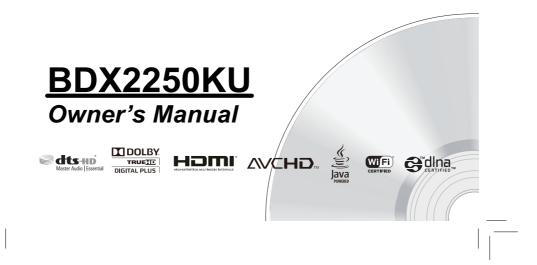


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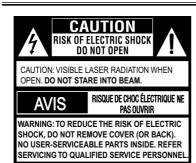
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Important Safety Information

SAFETY PRECAUTIONS





The lightning flash with an arrowhead symbol, within the equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons



The exclamation point within the equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in this owner's manual.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK. DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE. DANGEROUS HIGH VOLTAGES ARE PRESENT INSIDE THE ENCLOSURE. DO NOT OPEN THE CABINET. REFER SERVICING TO QUALIFIED PERSONNEL ONLY.

The symbol for Class II

(Double Insulation)

IMPORTANT SAFETY INSTRUCTIONS

- Read these instructions 1
- Keep these instructions 2. Heed all warnings З.
- Follow all instructions. 4
- 5. Do not use this apparatus near water.
- 6. Clean only with a dry cloth.
- Do not block any of the ventilation openings. Install in accordance with the manufacturer's instructions. Do not install near any heat sources such as radiators,
- 8. heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug 9. has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If

the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet. 10. Protect the power cord from being walked on or pinched

- particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11. Only use attachments/accessories specified by the manufacturer. 12. Use only with the cart, stand, tripod, bracket
- or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/ apparatus combination to avoid injury from tip-over.
- 13. Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as the power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

ADDITIONAL SAFETY INSTRUCTIONS

- 15. Do not overload wall outlets; extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.
- 16. Never expose the apparatus to dripping or splashing or place items such as vases, aquariums, any other item filled with liquid, or candles on top of the unit.
- 17. Keep your fingers well clear of the disc tray as it is closing. Neglecting to do so may cause serious personal injury
- 18. Do not place anything on top of this unit.19. Do not place the apparatus on amplifiers or equipment that may produce heat. 20. Never block or cover the slots or openings in the unit.
- Never place the unit: 1) on a bed, sofa, rug or similar surface; 2) too close to drapes, curtains, or walls; or 3) in a confined space such as a bookcase, built-in cabinet, or any other place with poor ventilation.

The slots and openings are provided to protect the unit from overheating and to help maintain reliable operation.

- 21. Do not use a cracked, deformed, or repaired disc. These discs are easily broken and may cause serious personal injury and apparatus malfunction.
- 22. If the apparatus should emit smoke or an unusual odor. immediately disconnect the power cord from the wall outlet. Wait until the smoke or smell stops, then ask your dealer for a check and repair. Neglecting to do so may cause fire.
- 23. During thunderstorms, do not touch the connecting cables or the apparatus.
- 24. Warning: To prevent spread of fire, keep candles or other open flames away from this product at all times
- 25. Mains plug is used as disconnect device and it should remain readily operable during intended use. In order to disconnect the apparatus from the mains completely. the mains plug should be disconnected form the mains socket outlet completely.



Important Safety Information

CAUTION:

- To prevent direct exposure to laser beam, do not try to open the enclosure. Visible and invisible laser radiation when open and interlocks defeated. DO NOT STARE INTO BEAM.
- Use of controls or adjustments or performance of procedures other than those specified may result in hazardous radiation exposure.
- Danger of explosion if battery is incorrectly replaced.
 Replace only with the same or equivalent type.

Warning: Batteries shall not be exposed to excessive heat such as sunshine, fire or the like.

FCC Information

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

The party responsible for compliance to these rules is: Toshiba America Information Systems, Inc. 9740 Irvine Blvd., Irvine, CA 92618. Ph: 1-800-631-3811

FII. 1-600-631-3611

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with

minimum distance 20cm between the radiator and your body.

This class B digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe B est conforme à

la norme NMB-003 du Canada.

WARNING: Changes or modifications to this unit not expressly approved by Toshiba, or parties authorized by Toshiba, could void the user's authority to operate the equipment.

On Placement

- Do not use this unit in places which are extremely hot, cold, dusty or humid.
- Do not restrict the air flow of this unit by placing it somewhere with poor air flow, by covering it with a cloth, or by placing it on bedding or carpeting.
- Be sure to remove the disc and unplug the AC power cord from the outlet before carrying the unit.

<u>On Safety</u>

- Do not handle the AC power cord with wet hands and do not put your fingers or objects into the unit.
- When connecting or disconnecting the AC power cord, grip the plug and not the cord itself. Pulling the cord may damage it and create a hazard.
- When you are not going to use the unit for a long period of time, disconnect the AC power cord.

On Condensation

 When left in a heated room where it is warm and damp, water droplets or condensation may form inside the equipment. When there is condensation inside the unit, the unit may not function normally. Let the unit stand for 1-2 hours before turning the power on or gradually heat the room and allow the unit to dry before use.

On Recycling

- This unit's packaging materials are recyclable and can be reused. Please dispose of any materials in accordance
- with your local recycling regulations. Batteries should never be thrown away or incinerated but disposed of in accordance with your
- or incinerated but disposed of in accordance with your local regulations concerning chemical wastes.

mark are registered U.S. marks.



Products that earn the ENERGY STAR® prevent greenhouse gas emissions by meeting strict energy efficiency guidelines set by the U.S. Environmental Protection Agency and the U.S. Department of Energy. ENERGY STAR and the ENERGY STAR

Supplied Accessories

Remote Control with Batteries (AAA x 2)	x 1
Owner's Manual	
Quick Start Guide	x 1

Symbols Used in this Manual

To specify for which media type each function is, we put the following symbols at the beginning of each item to operate

Symbol	Description		
	Description refers to BD-video and BD- RE / BD-R recorded in BDMV format		
Description refers to DVD-video			
ØCD	Description refers to Audio CD / DTS-CD		
AVCHD	Description refers to DVD-RW/-R with AVCHD files		
МРЗ	Description refers to BD-RE/-R, DVD- RW/-R and CD-RW/-R with MP3 files		
WMA	Description refers to BD-RE/-R, DVD- RW/-R and CD-RW/-R with WMA files		
JPEG	Description refers to BD-RE/-R, DVD- RW/-R and CD-RW/-R with JPEG files		

If you do not find any of the symbols listed above under the function heading, the operation is applicable to all media.

Trademark Information

BLOCKBUSTER name, design and related marks are trademarks of Blockbuster L.L.C. © All rights reserved. Netflix is a registered trademark of Netflix Inc. VUDU is a trademark of VUDU, Inc. CinemaNow is a registered trademark of Best Buy, Inc.

YouTube is a registered trademark of Google, Inc Pandora is a registered trademark of Pandora Media,

Inc Picasa is a trademark of Google, Inc.



Manufactured under license under U.S. Patent Nos: 5,956,674; 5,974,380; 6,226,616; 6,487,535; 7,392,195; 7,272,567; 7,333,929; 7,212,872 & other U.S. and worldwide patents issued & pending. DTS-HD, the Symbol, & DTS-HD and the Symbol together are registered trademarks & DTS-HD Master Audio | Essential is a trademark of DTS, Inc. Product includes software. © DTS, Inc. All Rights Reserved.

Wi (Fi) CERTIFIED

The Wi-Fi CERTIFIED Logo is a certification mark of the Wi-Fi Alliance. The Wi-Fi Protected Setup Mark is a mark of the Wi-Fi Alliance.

Logo Licensing Corporation.

"DVD" is a trademark of DVD Format /



x.v.Color

x.v.Color and x.v.Color logo are registered trademarks of Sony Corporation.

"AVCHD" and the "AVCHD" logo are trademarks of Panasonic Corporation and Sony Corporation.

Ηοπι

HDMI, the HDMI logo, and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.



______ Blu-ray Disc™, Blu-ray™, BD-Live™ and BONUSVIEW™ and the logos are trademarks of the Blu-ray Disc Association.

DOLBY. TRUE

DIGITAL PLUS

Manufactured under license from Dolby Laboratories. Dolby, Pro Logic and the double-D symbol are trademarks of Dolby Laboratories.

Plays Windows Media™

Windows Media and the Windows logo are trademarks or registered trademarks of Microsoft Corporation in the United States and/or other countries.





may be trademarks of their respective Java owners.

DLNA®, the DLNA Certification Logo and DLNA CERTIFIED™ are trademarks, service marks, or certification marks of the Digital Living Network Alliance.

Features

<u>Blu-ray Disc™</u>

You can enjoy Blu-ray Disc[™] which is capable of storing five times more data than a conventional DVD.

BD-Java

With some Blu-ray Disc[™] which support Java applications, you can enjoy the interactive functions such as games or interactive menus.

BD-Live™

BD-Live[™] (BD-ROM version 2 Profile 2.0) that allows interactive functions to be used when this unit is connected to the Internet in addition to the BONUSVIEW function. The various functions differ depending on the disc.

Full high-definition video playback

Watch movies in the highest picture quality available for your HDTV. This unit offers full high-definition video playback up to 1080p resolution for an amazing viewing experience. A highly detailed picture and increased sharpness delivers a more true-to-life picture.

DVD Upconversion for enhanced picture quality

Your current DVD will look even better than before thanks to video upconversion. Upconversion will increase the resolution of standard definition DVD to high definition up to 1080p over an HDMI connection. The picture will be less jagged and more realistic for a near high-definition experience.

Enjoy your content on different kinds of media

Full backwards compatibility with Blu-ray Disc[™], DVD and CD ensures that you can continue to enjoy your current audio-video collection. Additionally, you can view JPEG digital pictures or listen to MP3 or Windows Media[™] Audio music files.

PIP (BONUSVIEW™)

Some BD-videos have the PIP function which enables you to display the secondary video in the primary video. You can call up the secondary video by pressing **BONUSVIEW** whenever the scene contains the secondary video.

Pop-up menu

Some BD-video have pop-up menu which is a navigation menu that can be called up and be operated on the TV screen without interrupting the playback. You can call up the pop-up menu by pressing **POPTOP** or **MENU**. Contents in the pop-up menu vary depending on the disc.

Playing back AVCHD files

This unit supports playback of AVCHD format files (new format for high definition video camcorders) recorded on disc. Your high definition personal archive is playable in HD quality.

<u>x.v.Color®</u>

This unit supports playback of video contents on discs recorded with "x.v.Color" technology. To watch this video content with the "x.v.Color", a TV or other display device supporting both video image reproduction using the "x.v.Color" standard and capable of manually switching its color setting is required. Please refer to the owner's manual of your display device for further information.

Wi-Fi CERTIFIED®

The Wi-Fi CERTIFIED logo is an assurance that Wi-Fi Alliance has tested a product in numerous configurations and with a diverse sampling of other devices to ensure compatibility with other Wi-Fi CERTIFIED equipment that operates in the same frequency band.

Easy and simple connection to your HDTV via HDMI®

Connect this unit to your HDTV with one single HDMI (High-Definition Multimedia Interface) cable. It is recommended to use a High Speed HDMI Cable for better compatibility. The high definition video output signal will be transferred to your HDTV without conversion to analog signals, so you will get excellent picture and sound quality.

Thanks to other multiple outputs, you can also easily connect to your home theater system or amplifier.

HDMI® CEC (Consumer Electronics Control)

This unit supports HDMI CEC, which allows integrated system control over HDMI and is part of the HDMI standard.

This function may not work properly on some devices.

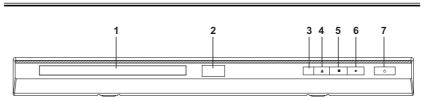
HDMI 1080p/24F output (Blu-ray Disc™ only)

This unit is equipped with a feature which can provide the smooth movement in the playback of film originated material with the frame rate of 24 frames per second with progressive scan. (Available only when the TV is connected by an HDMI cable and compatible with 1080p/24F frame input.)

Copyright protection system

To play back the digital video images of a Blu-ray Disc[™] / DVD via an HDMI connection, it is necessary that both the unit and the TV (or an AV amplifier) support a copyright protection system called HDCP (highbandwidth digital content protection system). HDCP is copy protection technology that comprises data encryption and authentication of the connected AV device. This unit supports HDCP. Please read the operating instructions of your TV (or AV amplifier) for more information.

Front Panel



1. Disc tray

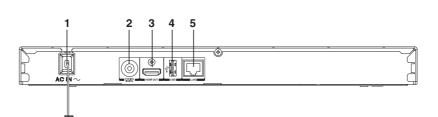
- 2. Power indicator
- 3. Remote sensor
- 4. OPEN/CLOSE button
- 5. STOP button

6. PLAY button

7. POWER button

 Press to turn on the unit, or to turn the unit into the standby mode. (To completely turn off the unit, you must unplug the AC power cord.)





1. AC power cord

- Connect to a standard AC outlet to supply power to this unit.
- Unplug this cord from the AC outlet to completely turn off the unit.

2. COAXIAL DIGITAL AUDIO OUT jack

- Use to connect an AV receiver / amplifier, Dolby Digital / DTS decoder or other device with a coaxial digital audio input jack using a coaxial digital audio cable.
- 3. HDMI OUT jack
 - Use to connect a TV with an HDMI compatible port via an HDMI cable.
 - * HDMI connection is required. Cables are not included. Analog connection is not supported.

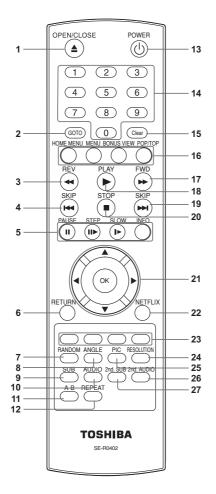
4. USB Port

- Use to connect a USB flash drive/wireless LAN adapter (not included).
- 5. LAN terminal
 - Use to connect a network equipment with LAN cable.

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Remote Control

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No.	Item	Description		
1		Press to open or close the disc tray.		
2	GOTO	Press to display the search menu.		
3	REV ◄	During playback, press to fast reverse the playback.		
4	SKIP I ⊲ ⊲	 During playback, press once to return to the beginning of the current title, chapter, track or file. During playback, press twice to return to the previous title, chapter, track or file. During the JPEG playback, press to return to the previous file. 		
	PAUSE	Press to pause playback.		
	STEP II >	Press to advance one frame.		
5	SLOW	Press to play back the disc in slow motion.		
	INFO	Press to display disc information.		
6	RETURN	Press to return to the previous menu.		
7	RANDOM	Press to turn random function on or off for Audio CD, MP3 or WMA disc.		
8	ANGLE	Press to select a viewing angle if multiple angles are available on the disc.		
9	SUB (SUBTITLE)	Press to display the subtitle menu.		
10	AUDIO	Use to select the audio mode.		
11	А-В	Press to play back a defined section between point A and B repeatedly.		
12	REPEAT	Press to toggle between various repeat modes.		
13 POWER ()		Press to turn on the unit, or to turn the unit into the standby mode. (To completely turn off the unit, you must unplug the power cord.)		

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14 Number buttons In playback mode, press the number buttons to enter a title, chapter, track, time or file number. In menu mode, press to enter the parental code password. 15 CLEAR Press to clear an input error. HOME MENU Press to display the home menu of the player. MENU Press to display disc menu. BONUSVIEW Press to display disc menu. BONUSVIEW Press to switch picture-in-picture feature on or off (only applicable to BD-video which supports the PIP function). 16 During Blu-ray Disc playback, press to open a menu that lets you control Blu-ray Disc playback, press to open the DVD menu (if available). 17 FWD ►► During playback, press to fast forward the playback. 18 PLAY ► Press to start playback or resume playback. 19 SKIP ►►I • During the JPEG playback, press to skip to the next title, chapter, track or file. 19 SKIP ►►I Press to solect items or settings. 21 OK(ENTER) Press to use Netflix service directly (Make sure your Bluray Disc TM player is correctly connected to the internet and network settings are properly configured.) 22 NETFLIX Press to select items on some Blu-ray Disc TM player is correctly connected to the internet and network s	No.	Item	Description		
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18 PLAY resume playback. 19 SKIP ►►I • During playback, press to skip to the next title, chapter, track or file. 19 SKIP ►►I • During the JPEG playback, press to go to the next file. 20 STOP Press to stop playback. 21 • Press to stop playback. Press to select items or settings. 21 • OK(ENTER) • Press to confirm or select menu items. 22 NETFLIX • Press to use Netflix service directly. (Make sure your Bluray Disc™ player is correctly configured.) 23 RED / GREEN / BLUE / YEL. • Press to select items on some Blu-ray Disc™ 23 RED / GREEN / BLUE / YEL. • Press to select items on some Blu-ray Disc™ 23 RED / GREEN / BLUE / YEL. • Press to select items on some Blu-ray Disc™ 24 BESOLUTION Press to select the video	17	FWD ►►			
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			on some Blu-ray Disc [™] contents. • When file list / thumbnail list is shown, press to switch		
	24	RESOLUTION			

PIC	In playback mode, use to adjust picture quality according to your preference (Actual effect to picture may vary depending on TV.):
	 E.P.M (Enhanced Picture Mode): The picture is sharper with enhanced color. Sharpness
	• Sharphess
2nd. AUDIO	In PIP mode, press to turn the audio for the secondary video on or off.
2nd. SUB (SUBTITLE)	In PIP mode, press to turn the subtitle for the secondary video on or off.
	2nd. AUDIO 2nd. SUB

Installing batteries

Install the batteries (AAAx2) matching the polarity indicated inside battery compartment of the remote control.

Open the cover. 1



2 Insert batteries.



Make sure to match the $\mbox{+}\xspace$ and $\mbox{-}\xspace$ on the batteries to the marks indicated in the battery compartment.

Close the cover. 3

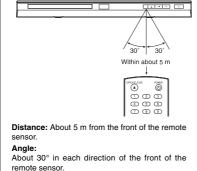
Caution: Never throw batteries into a fire.

- Notes:
 Do not mix different battery types or combine used batteries with new ones.
 If the remote control does not operate correctly, or if the operating range becomes reduced, replace both batteries with new one.
- If the batteries are dead or if you will not be using the remote control for a long time, remove the batteries to prevent battery acid from leaking into the battery compartment.

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Operating with the remote control

Point the remote control at the remote sensor and press the buttons.



Do not expose the remote sensor of the Blu-ray Disc™ player to a strong light source such as direct sunlight or other illumination. If you do so, you may not be able to operate the Blu-ray Disc[™] player via the remote control.

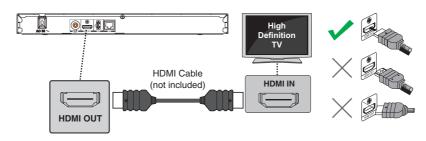
Notes:

- · Direct the remote control at the remote sensor of the Blu-ray Disc[™] player.
- When using the remote control, press the buttons at intervals of about 1 second to ensure the correct mode of operation.
- Do not drop or give the remote control a shock.
- · Do not leave the remote control near an extremely hot or humid place.
- · Do not spill water or put anything wet on the remote control.
- Do not open the remote control.
- · If the remote control is not going to be used for a long time, remove the battery to avoid damage caused by battery leakage corrosion.

Connections

Connecting to a TV using an HDMI® cable

This connection provides better picture quality and supports up to 1080i/1080p, 1080p/24F resolution. Connect a HDMI cable from the HDMI output jack on this product to the HDMI input jack on the TV.



Notes:

- HDMI connection is required. Cables are not included. Analog connection is not supported. • Do not tilt the connector when inserting it into the HDMI jack, and make sure the shapes of the jack and the
- connector are matched
- ٠
- When using a non-HDCP compatible TV, the image will not display properly. An HDMI cable carries both video and audio signals. If you want to use TV speakers, you do not need to make an additional audio connection if you are using an HDMI cable.

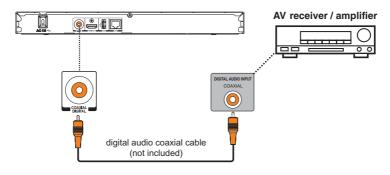
| 10

Connections

Connecting to a digital amplifier/AV receiver

Route the sound from this player to other device to enhance audio output.

- · Connect a coaxial cable from the COAXIAL DIGITAL jack on this product to the COAXIAL jack on the device.
- . If your AV receiver or amplifier has an HDMI jack, you can also connect the HDMI cable to HDMI IN jack on your AV receiver or amplifier.

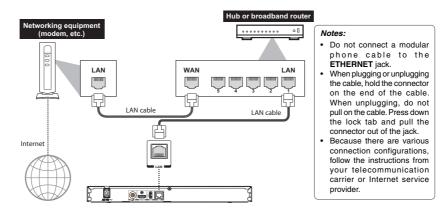


Connecting to network

- Your Blu-ray Disc[™] player can be connected to your home network: By connecting an Ethernet cable to the ETHERNET jack on the rear of your player and to a wired hub or router. Using a wired network provides the best performance, because the attached devices connect directly to the network and are not subject to radio frequency interference.
 By connecting through the built-in wireless device and a wireless access point or router.

Connecting your player to a wired router

 Connect an Ethernet cable (CAT5 or better with RJ45 connector) to the ETHERNET jack on the back of your player and to an Ethernet jack on a hub or broadband router.

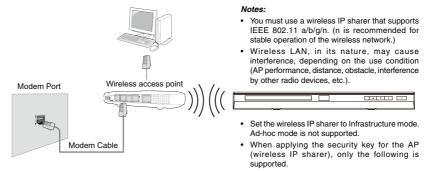


Connections

Connecting your player to a wireless access point or router

Your Blu-ray Disc[™] player has an integrated Wi-Fi device and antenna. No physical connection to the wireless router is necessary.

- Configure your player to access the wireless access point or router. For more information, see "Configuring a wireless
 Internet connection" on page 26.
- The network configuration and connection method may vary depending on the equipment in use and the network environment. Your Blu-ray Disc™ player is equipped with an IEEE 802.11n wireless module, which also supports the 802.11 a/b/g/n standards. For the best wireless performance, we recommend using an IEEE 802.11n certified Wi-Fi network (access point or wireless router).



D

Authentication Mode : WPAPSK, WPA2PSK
 Encryption Type : WEP, TKIP, AES

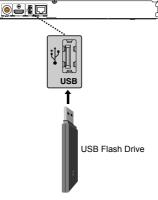
Connecting a USB Flash Drive

A USB flash drive provides an additional memory to software upgrade and enjoy BD-Live™ bonus content. You can also enjoy playing back MP3/WMA/JPEG files stored in the USB flash drive.

Inserting a USB flash drive into the USB port on the back of Blu-ray Disc[™] player until it clicks.

Notes:

- Connect only a USB flash drive to the USB port on this product.
 If you cannot easily insert the USB flash drive, you may have inserted it incorrectly. Try to turnover the device and then insert
- again.Do not remove the USB flash drive during playback.
- Bo-Live™ Access to BD-Live™ requires use of USB flash drive (not included) installed in the USB port. For additional information regarding the access to BD-Live™, see page 21 of the manual.
 TOSHIBA does not guarantee 100% compatibility with all USB flash drives.



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Information on Playback

Before you start playing back a disc, read the following information.

Playable Discs and Files

This unit is compatible to play back the following discs / files.

To play back a disc / file, make sure that it meets the requirements for region codes and color systems as described below. You can play back discs that have the following logos.

Other disc types are not guaranteed to play back.

Playable discs	Logos		
Blu-ray Disc [™] - BD-ROM (single / dual layer) - BD-RE (single / dual layer) (Recorded in BDMV format) - BD-R (single / dual layer) (Recorded in BDMV format) (Unclosed discs may not be played back.)	Blu-ray Disc		
DVD-ROM	VIDEO		
DVD-RW			
DVD-R			
CD-DA (audio CD)			
CD-RW	COMPACT COM		
CD-R	GIGTAL AUGO		
DTS-CD	-		

Playable files	Media
AVCHD	DVD-RW/-R
MP3	
Windows Media™ Audio	BD-RE/-R, DVD- RW/-R, CD-RW/-R
JPEG	

This unit cannot playback the disc contents protected by Windows Media™ Digital Rights Management (ĎRM).

Unplayable Discs and Files

- The following discs will not be played back in this unit. CD-ROM
- CD-I (compact disc-interactive)
- DVD-RAM
- VSD (video single disc)
- DVD-audio HD DVD
- VIDEO CD Unfinalized disc
- SACD
- Blu-ray Disc™ / DVD containing DivX[®] files. Blu-ray Disc™ / DVD hybrid disc (played back as a BD-
- video only) Blu-ray Disc™ that contains AVCHD files
- . DVD-RW/-R recorded in non compatible recording format.
- Super Audio CD Only the sound on the CD layer can • be heard. The sound on the high-density Super Audio CD layer cannot be heard.
- Playability of dual discs are not guaranteed. Multi session disc •
- Multi border disc

Region Codes

This unit has been designed to play back BD-video with region "A" and DVD-video with region "1" or "ALL". You cannot play back BD-video or DVD-video that are labeled for other regions. Look for the symbols on the right on your BD-video or DVD-video.

If these region symbols do not appear on your BD-video or DVD-video, you cannot play back the disc in this unit. The letter or number inside the globe refers to region of the world. A BD-video or DVD-video labeled for a specific region can only be played back in the unit with the same region code.



Color System

BD-video and DVD-video are recorded in different color systems throughout the world. The most common color system is NTSC (which is used primarily in the United States and Canada).

Structure of Disc Contents

The contents of Blu-ray Disc™ / DVD / AVCHD are generally divided into titles. Titles may be further subdivided into chapters.

Blu-ray Disc [™] / DVD / AVCHD				
	e1 —		title 2	-
chapter 1	chapter 2	chapter 1	chapter 2	chapter 3
	-	A		
1 M C - 1	-4-5-		1 and	

Audio CD is divided into tracks.

4		audio CD		
track 1	track 2	track 3	track 4	track 5
M \sim	\sim 1 T L	1	\sim 1 ${ m mm}$	$\mathbb{N}\mathbb{I}^{\sim}$

Data discs or USB flash drive containing MP3 / WMA /JPEG are divided into folders, and the folders are subdivided into files.

— MP3 / WMA / JPEG—

folder (file 1	group) 1 file 2	file 3	der (group) file 4	2file 5
\sim תוז \sim	<u>~זעו</u>	~[111]	ענגנן_	רווע
<u>6</u>	\$,	₹ 2		<u>_</u>

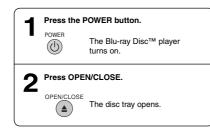
Basic Playback AVCHD OUT

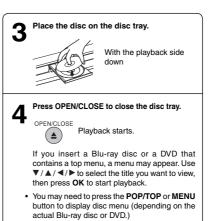
Preparations

· When you want to view a disc, turn on the TV and select the video input connected to the Blu-ray Disc™ player.

CAUTION:

Keep your fingers well clear of the disc tray as it is closing. Neglecting to do so may cause serious personal injury.





To start playback in stop mode Press > PLAY.

To pause playback (still mode)

Press II PAUSE during playback.

To resume normal playback, press the PLAY button. The sound is muted during still mode.

To stop playback

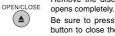
Press **STOP**. The home menu is displayed. For Blu-ray discs, press \mathbf{V}/\mathbf{A} to select BD-ROM, then press **OK** to start playback at the beginning of the disc.

For DVDs/audio CDs, press > PLAY to resume normal playback.

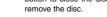
- · Depending on the disc, playback starts where it
- If you press STOP twice, playback stops completely. To stat playback again, press ▶ PLAY. Playback starts at the beginning of the disc.

To remove the disc Press OPEN/CLOSE.

Remove the disc after the disc tray



Be sure to press the **OPEN/CLOSE** button to close the disc tray after you



To turn the power off

Press **POWER** button to turn the unit off.

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Variable Speed Playback

You can play discs at various speeds, and resume playback from the location where you stopped playback.

Playing in fast reverse / forward directions AVCHD OUD OCD

Press ◀◀ or ►► during playback.)
FWD : Fast forward playback	
EV : Fast reverse playback	
Each time you press this button, the fast-fon or fast-reverse speed changes in the follow sequence:	
Fast x 2 → Fast x 4 → Fast x 8 → Fast x 16	→
Fast x 32 → Fast x 64 → Fast x 128.	,
To resume normal playback Press ► PLAY.	
Notes:	
 The Blu-ray Disc[™] player mutes sound and su 	htitlas

during reverse and forward scan. The playback speed may differ depending on the disc.

Playing frame by frame SED AVCHD

Press III> during still playback.

Each time you press this button, the picture advances one frame.

To resume normal playback

Press PLAY.

Note: The sound is muted during frame by frame playback.

Playing in slow motion AVCHD

Press Induring playback.

Each time you press this button, the slow- (\mathbf{I}) motion speed changes in the following sequence: Slow x 1/2 → Slow x 1/4 → Slow x 1/8

To resume normal playback Press **PLAY**.

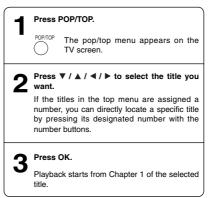
Notes:

- The sound is muted during slow-motion playback. • 3 speeds are available.

Locating a Desired Section

Normally, Blu-ray discs and DVDs are divided into titles, and the titles are sub-divided into chapters. Audio CDs are divided into tracks. You can quickly locate any specific title, chapter, or track.

Locating a title using the pop/top menu



Locating a specific chapter or track

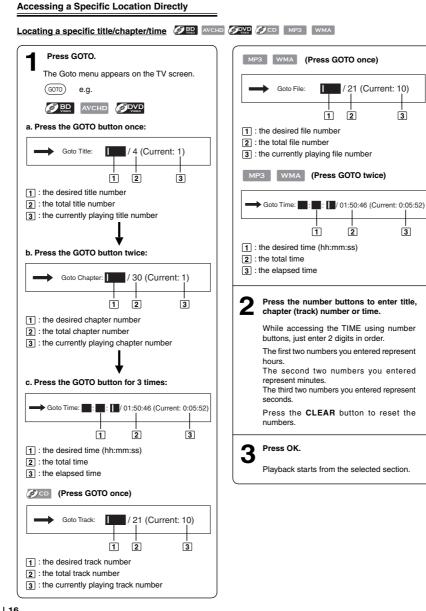
Press I a or I repeatedly to access the chapter or track number you want.

Playback starts from the selected chapter or track.

Playback starts from the beginning of the current chapter or track. When you press twice in quick successions, playback starts from the beginning of the preceding chapter or track.

To locate succeeding chapters or tracks.

Note: Some titles may not display chapter numbers.



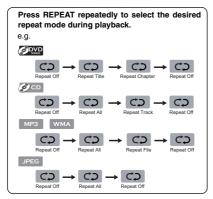
| 16

Playback

Repeating a Title, Chapter, Track or Specific Segment

Repeating a title, chapter or track

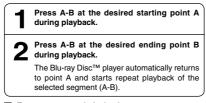
STER STATE CD MP3 WMA



Notes:

- The repeat setting will be cancelled when you stop playback.
- The chapter, title or track repeat will be cleared when moving to another chapter, title, track / file or folder.
- Repeat playback does not function during A-B repeat playback.
- Chapter and title repeat are not available with some scenes.
- When the repeat setting is set for a MP3 or WMA folder (file), the repeat setting will be cancelled if you select other MP3 or WMA folder (file) to playback.

Repeating a specific segment



To resume normal playback

Press A-B until CO is displayed.

Notes:

- Some discs may not permit A-B repeat operation.
 You can specify a segment only within the current.
- You can specify a segment only within the current title or track.
- You cannot set the A-B repeat function for a segment that includes multiple camera angles.
- A-B repeat does not function during chapter, title, track or all repeat playback.

Playing in a Random Order

Playing tracks or files in a random order

🖉 С МРЗ WMA

Press RANDOM repeatedly to select Random ON during playback.

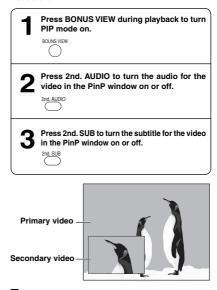
Once you turn RANDOM function on, the RANDOM tindicator will be activated and the system will play all files in a random sequence.

To resume normal playback

Press RANDOM repeatedly until "Random Off" is displayed.

PIP (BONUSVIEW™) Setting Ø

Some Blu-ray discs have the PIP function which enables you to display the secondary video in the primary video. You can call up the secondary video by pressing BONUS VIEW whenever the scene contains the secondary video. See the documentation that came with the disc for playback instructions.



To resume normal playback Press BONUS VIEW to turn off the PIP mode.

Note: PIP audio cannot be heard unless **Bitstream Mixed** has been selected on the Audio menu. For more information, see "Audio Setting" on page 23.

Camera Angle 🛛 🖉 🔛	Subtitle Selection 🖉 🖭 🖉 🕮
ome BD-video and DVD-video contain scenes which have een shot simultaneously from various angles.	During playback, press SUB.
1 During playback, press ANGLE. The selected angle will be displayed on the display bar at the top of the TV screen. Image: ▶ 01/03 Image: ▶ 01/03 The first digit indicates the current viewing angle, and the second digit indicates the total number of viewing angles.	Subtite ► 01/07 ENG PIP Subtite ► N/A In the example "01/07 ENG", "01" indicates the currently selected subtitle. "07" indicates the total number of subtitles. "ENG" indicates the subtitle language. Press ►, then use ▼/▲ to select the desired angle.
Z angle.	Displaying On-screen Information
Audio Selection 🖉 🕮	You can check information about the current disc
Audio Selection I During playback, press AUDIO.	Image: AvcHD Image: Color MP3 WMA JPE You can check information about the current disc pressing INFO. Image: Color MP3 WMA JPE Image: Color MP3 Title 1 Chapter 1/25 Image: Color MP3 Image: Color MP3 <t< td=""></t<>
1 During playback, press AUDIO.	You can check information about the current disc pressing INFO.
1 During playback, press AUDIO. Image: Audio → 01/03 ENG Dolby TrueHD Image: PIP Audio → 01/03 ENG Dolby TrueHD In the example "01/03 ENG Dolby TrueHD", "01" indicates the currently selected audio channel. "03" indicates the total number of audio channel. "ENG" indicates the audio language. "Dolby TrueHD" describes the currently selected	You can check information about the current disc pressing INFO.
1 During playback, press AUDIO. Image: Constraint of the state of	You can check information about the current disc pressing INFO.

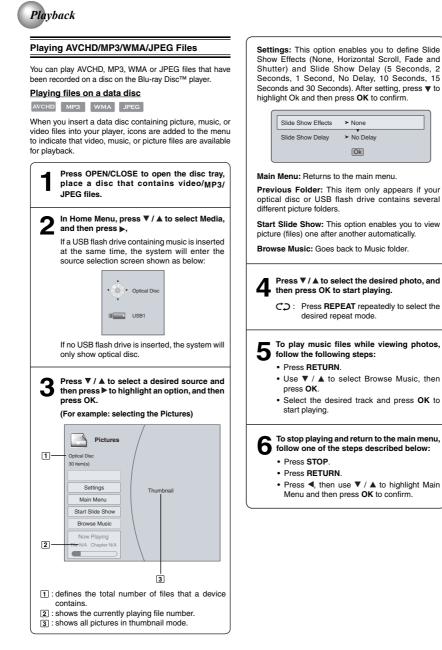
File: 4/13 flower.jpg

Off Pause

| 18 |

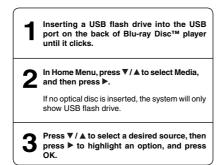
____|

_| |



Using a USB Flash Drive

You can play MP3, WMA or JPEG files that have been stored on USB flash drives on the Blu-ray Disc[™] player. <u>Operating a USB Flash Drive</u>



For detailed operations, please follow the instructions in "Playing files on a data disc" on page 19 for details.

Removing the USB Flash Drive

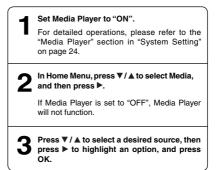
In stop mode, gently pull the USB flash drive out slowly.

Notes:

- If you cannot easily insert the USB flash drive, you may have inserted it incorrectly. Try to turnover the device and then insert again.
- Do not remove the USB flash drive during playback.

Using Media Player Function

Operating Media Player Function



Notes:

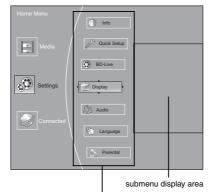
- Make sure your player is properly connected to the network before using Media Player. Furthermore, you need other Media Player servers in the network to see and/or hear contents.
- Do not remove the LAN connector during playback.

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You can change the default settings to customize performance to your preference.

General Operations

- 1. Press $\pmb{\nabla} \, / \, \pmb{\blacktriangle}$ to select **Settings** in home menu while in full stop mode, the Settings menu appears.
- 2. Press ► button, then use ▲ / ▼ button to select the setting options.
- 3. Press OK button.
- 4. Press ◀ or **RETURN** button to return to the previous menu



Settings menu items

Info Menu

This menu displays the following information:

- Software Version
- Software Date
- Netflix ESN
- In the main menu of Settings, press ► button, then use ▲ / ▼ button to select Info to display the version information on software and Netflix ESN.
- 2. Press < or RETURN to go to the previous menu.

Performing Quick-Setup

- 1. In the main menu of Settings, press ► button, then use ▲ / ▼ button to select Quick Setup, and then press OK to confirm.
- 2. Press OK to perform Quick Setup.
 - To exit the setup menu:
 - Use ▼ button to highlight "No thanks. I'll go through the full setup menu later", and then press **OK**.
 - Or press ◀ button directly.

- 3. Follow the on-screen instructions to customize the following settings to your preference:
- OSD Language Settings
- (English/French/Spanish)
- Resolution - (HDMI Auto/1080p/1080i/720p/480p/480i)
 - TV Aspect (16:9 Wide/16:9 Pillabox/4:3 Pan and Scan/4:3 Letterbox)
 - Optical Disc Auto Play
 - (Disable/Enable)
 - Screen Saver Duration
- (Off /5 Minutes/10 Minutes/ 20 Minutes/ 30 Minutes)
- 4. After setting, press OK to confirm and exit the setup.

Note: If it is the first time for the player to start up or users restore all settings to factory defaults, the system will prompt you to perform Quick Setup. Repeat the steps described as above to complete the setup.

Using BD-Live[™] Features

Some (but not all) Blu-ray Disc™ discs contain additional features that are made available to players that are connected to the internet, and have additional memory added. These additional features may include things like:

- the ability to download new movie trailers
- additional 'commentary' by actors and directors
- multiperson game play and chat

In order to access BD-Live™ functions, the player must be properly configured for BD-Live internet access, and it must be equipped with additional memory.

Note: BD-Live™ requires connection of a USB flash drive of at least 1 GB (sold separately) to USB port. Performance of interactive features may vary due to disc design or content, and may also require an always-on broadband internet connection. Firmware update may be required for some interactive features. Some features may require additional bandwidth.

- 1. In the main menu of Settings, press ► button, then use
- ▲ / ▼ button to select BD-Live, then press OK.
 2. Press ▲ / ▼ to select an option, and then press OK.
- 3. Use \blacktriangle / \bigtriangledown to select the desired setting, and then press OK to confirm.4. Press ◀ to go to the previous menu.

BD-Live Internet Access:

- Limit Access Allows Internet access with valid BD-Live™ network access approval.
- Always Allow Access Always allows BD-Live Internet access.
- Prohibit Access Never allows BD-Live Internet access.

In order to set the player up for BD-Live Internet Access, perform the following steps:

- In the main menu of Settings, press button, then use
 ▲ / ▼ to select BD-Live, then press OK.
- Press ▲ / ▼ to select "BD-Live Internet Access", and then press OK.
- Use ▲ / ▼ to select the desired setting, and then press OK to confirm.
- Make sure that "Limit Access" or "Always Allow Access" is checked.
 Once the USB flash drive has been inserted, if there
- Once the USB flash drive has been inserted, if there is not at least 100Mbyte of free space on the device, you should choose "Erase Blu-ray Storage" from the BD-Live setup menu.
 Press ◀ to return to the main menu of Settings, then
- Press ◄ to return to the main menu of Settings, then use ▲ (▼ to highlight Network, and then press OK. (For details, please refer to "Network Connection Setting" on Page 26.)

Notes:

- Depending on your connection environment, it may take time to connect to the Internet or the Internet may not be connected.
- When BD-Live[™] function are used and the unit is connected to the Internet, you may be charged for this communication.
- Do not remove the USB flash drive when using the BD-Live™ function.

BD-Live Storage:

This option is used to tell the Blu-ray Disc[™] player whether or not to use an inserted USB flash drive to store BD-Live[™] content (movie trailers, additional scenes, etc.).

In order to add BD-Live™ memory for BD-Live Internet Access, insert a USB flash drive (1GB is recommended) into the USB port on the player.

Erase Blu-ray Storage:

If you choose **OK** to erase Blu-ray storage, all bookmarks and BD-Live[™] content saved in memory are deleted.

Display Setting

- In the main menu of Settings, press ► button to select Display, and then press OK to confirm.
 Press ▲ / ▼ to select an option, and then press OK.
- Press ▲ / ▼ to select an option, and then press OK.
 Use ▲ / ▼ to select the desired option, and then press OK to confirm your selection.
- 4. Press \blacktriangleleft to go to the previous menu.

HDMI Status:

This option displays the HDMI status. If an HDMI TV is connected, **Connected** appears. If an HDMI TV is not connected, **Disconnected** appears.

HDMI Preferred Format:

This option shows the best HDMI format for the connected TV. If HDMI is not pulled out, a composite image is not output.

* HDMI connection is required. Cables are not included. Analog connection is not supported.

Resolution:

You can define the video output resolution in this option.

Т Туре	Resolution
If your TV is a high-definition TV(HDTV) connected to the HDMI jack on your player and you want your player to set the output resolution based on information exchanged between the TV and your player over the HDMI cable.	HDMI Auto
If the TV is a high-definition TV (HDTV) capable of 1080p (any frame rate) connected to the HDMI jack on your player	1080p
If your TV is a high-definition TV (HDTV) capable of 1080i only	1080i
If your TV is a high-definition TV (HDTV) capable of 720p only	720p
If your TV is an enhanced-definition TV (EDTV) capable of 480p only	480p
If your TV is a standard-definition TV (SDTV) capable of 480i only	480i

Notes:

- Selecting a resolution the TV does not support could result in an unstable picture or loss of the picture. See the documentation that came with the TV to find the resolutions the TV supports.
- Only the HDMI output on your player supports 1080p video output at any frame rate.

TV Aspect:

16:9 wide, 16:9 Pillarbox, 4:3 Pan and Scan and 4:3 Letter Box are available for your choice.

Film Mode:

Movies are recorded on film at a rate of 24 pictures (frames) per second. Many of the movies on Blu-ray discs are placed on the discs at this frame rate. If your TV supports 24 frames per second, but you would prefer viewing the video at a higher frame rate, you should turn off Film Mode. **Off** selects a 60 frames/second output format.

Deep Color:

This option decides whether to turn off the Deep Color (color depth) setting for video signals output from the HDMI OUT jack.

Connecting the player and a TV that supports Deep Color allows more accurate color reproduction than when connecting it to a TV that does not support Deep Color. It is recommended to set this option **Off** if the picture is unstable or colors appear unnatural.

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Audio Setting

The settings in the Audio menu will configure the Blu-ray Disc[™] player's digital audio outputs (HDMI or Coaxial). 1. In the main menu of Settings, press ► button, then use

- ▲ / ▼ button to select Audio, then press OK button.
 2. Press ▲ / ▼ to select an option, and then press OK.
- 3. Use \blacktriangle/ \forall to select your preferred audio items, and then press **OK** to confirm your selection. 4. Press **◄** to go to the previous menu.

PCM Downsampling:

If you don't have a surround sound receiver connected to the Blu-ray Disc™ player, you should leave the PCM downsampling to 48 kHz, and proceed to the next setup menu item

If you have a surround sound receiver connected to the Bluray Disc[™] player, and you have connected to the surround receiver via the Blu-ray Disc™ player's HDMI output, this setting has no effect on the audio going to the HDMI output of the player. Leave the PCM downsampling to 48 kHz, and proceed to the next setup menu item.

NOTE: Incorrectly setting the digital audio output's PCM sampling rate too high may result in unpredictable audio playback

Digital Output:

- PCM Stereo Sets the output to PCM Stereo if you do not have an audio receiver connected to your Blu-ray Disc[™] player or the audio receiver connected to Blu-ray Disc[™] player is not a 5.1/7.1 channel receiver.
- Bitstream HD Lets your player send Dolby TrueHD or DTS-HD MA bitstreams over HDMI (if your player is connected to a compatible HDMI audio receiver). If your player is not connected to a compatible HDMI receiver (for example, your player is connected directly to the TV, a compatible audio signal is automatically sent over the HDMI connection. With this setting, Blu-ray audio is limited to the soundtrack for the main movie (no PIP audio).
- Bitstream Legacy Sends a DTS or Dolby Digital bitstream from the disc over the HDMI connection. Blu-ray audio is limited to the soundtrack for the main movie (no PIP audio).
- **Bitstream Mixed** Sends a DTS or Dolby Digital bitstream over the HDMI or Coaxial connection. This mode is primarily intended for use when you want to hear both PIP audio and the movie audio.
- PCM 5.1 Sends a PCM audio signal of up to 5.1 channels over the HDMI connection.
- PCM 7.1 Sends a PCM audio signal of up to 7.1 channels over the HDMI connection

Dynamic Range Control:

Dynamic Range Control means that you can allow the Bluray Disc™ player to make the loud parts of a movie's audio track quieter than they would be in the theatre, without making the dialog of the actors any quieter.

This would be useful, for instance, when you want to watch a movie in the evening when others might be sleeping.

NOTE: This setup menu item has no effect unless you have selected "Bitstream Mixed" in the Blu-ray Disc™ player's audio setup menu.

When Dynamic Range Control is set to Off, movie soundtracks are played with the standard dynamic range. When movie soundtracks are played at low volume or from smaller speakers, you can set Dynamic Range Control to On. Your player applies appropriate compression to make low-level content more intelligible and prevent dramatic passages from getting too loud.

Selecting the "Auto" option turns on the Dynamic Range Control for all Blu-ray Disc™ movie soundtracks except Dolby TrueHD. If you have selected a Dolby TrueHD track on the Blu-ray Disc™ disc, the "auto" selection tells the Blu-ray Disc[™] player to only turn on dynamic range control if information embedded in the Dolby TrueHD sound track tells it to do so

Stereo Downmix:

Select whether to downmix the multi-channel audio into fewer channels.

- Auto Downmixes the multi-channel audio into the specific stereo that the connected equipment supports
- Stereo (LoRo) Downmixes the multi-channel audio into two channel stereo. Choose when the Blu-ray Disc[™] player is connected to the equipment that does not support virtual surround function such as Dolby Pro Logic
- Surround Encoded (LtRt) Downmixes the multichannel audio into surround compatible stereo. Choose when the Blu-ray Disc[™] player is connected to the equipment that supports virtual surround function such as Dolby Pro Logic

Language Setting

- 1. In the main menu of Settings, press ► button, then use ▲ / ▼ to select Language, and then press OK.
 Press ▲ / ▼ to select OSD, Menu, Audio or Subtitle,
- and then press OK.
 3. Use ▲ / ▼ to select your preferred language, and then
- press OK to confirm your selection. 4. Press ◀ to go to the previous menu.

OSD:

This option enables you to select the on-screen menu language

Menu:

This option lets you to select the disc menu language.

- Notes:
- Not all languages are available on all discs. Most discs only have one menu language.

Audio:

You can choose the audio language from this option to your preference.

Notes:

- Not all languages are available on all discs.
- Some discs do not let you select the audio language using your player's menu. Instead, you have to select the audio language from the disc setup menu (the menu that appears after you insert the disc).

Subtitle:

You can customize your preferred subtitle language in this option.

- Notes:
- Not all languages are available on all discs. Some discs do not let you select the subtitle language using your player's menu. Instead, you have to select the subtitle language from the disc setup menu (the menu that appears after you insert the disc).
- You can also select the subtitle language from the subtitle menu in the on-screen menu.

Parental Control

- 1. In the main menu of Settings, press ▶, then press ▲ /
- ▼ to select **Parental**, and then press **OK**. 2. Press \blacktriangle / ▼ to select an option, and then press **OK**.
- 3. Use \blacktriangle / \blacktriangledown to select the desired option, and then press OK to confirm your selection. 4. Press ◀ to go to the previous menu

Note: If Parental Control was previously turned On, you will be prompted to enter the parental control password before being allowed to change these settings. (See "Turning parental control on or off" for details.)

Selecting the parental country

Parental Country is fixed in USA

Turning parental control on or off

- 1. In the main menu of Settings, press ▶, then press ▲ / ▼ to select Parental, and then press OK.
 2. Press ▲ / ▼ to select Parental Control, then press
- OK.
- 3. Press \blacktriangle / \triangledown to select **On** or **Off**, then press **OK** Press ◀ to go to the previous menu.

Setting the parental control level

- In the main menu of Settings, press ►, then press ▲ / ▼ to select Parental, and then press OK.
- 2 Press ▲ / ▼ to select Parental Level then press OK 3. Press \blacktriangle / \triangledown to select the rating level you want to block, then press OK. The rating and all higher ratings will be
 - blocked. You can select:
 - 1 [Kid Safe] Suitable for all children.
 - 2 [G] General audiences
 - 3 [PG] Parental guidance suggested.
 - 4 [PG-13] Not suitable for anyone under 13.
 - 5 [PG-R] Parental guidance recommended.
 - 6 [R] Not suitable for anyone under 17 unless supervised by a parent or adult guardian.
 - 7 [NC-17] Not suitable for anyone under 17.
 - 8 [Adult] All Blu-ray discs and DVDs can be played

4. Press ◀ to go to the previous menu.

- Setting the parental control password
- In the main menu of Settings, press ►, then press ▲ / ▼ to select Parental, and then press OK.
- 2. Press \blacktriangle / \blacksquare to select Parental Password, then press OK.
- 3. Enter a 4-digit number for the parental password, then use $\mathbf{\nabla}$ to highlight Ok, and then press **OK** to confirm. If you forget your password, reset your player to the factory defaults. For more information, see "Restore factory defaults" on page 25.
- 4. Press ◄ to go to the previous menu.

System Setting

- 1. In the main menu of Settings, press ▶ button, then use ▲ / ▼ button to select System, then press OK.
- 2. Press \blacktriangle / ∇ to select an option, and then press **OK**. 3. Use \blacktriangle / ∇ to select the desired setting, and then press
- OK to confirm.4. Press ◀ to go to the previous menu.

Optical Disc Auto Play:

If **Enable** is selected, it will load data and play back automatically when you insert a Blu-ray disc. When **Disable** is selected and if you insert a Blu-ray disc, the disc you can select will be displayed on the Settings menu.

Media Player:

Media Player function enables you to create an interoperability network with other devices for resource sharing based on a network

Screen Saver Duration:

This Blu-ray Disc[™] player has a screen saver feature that turns the screen black when your player is inactive. You can set the interval time you want your player to wait before activating the screen saver.

Note: The unit shuts down automatically in about thirty minutes if it remains idle and no activities are made.

CEC Support:

This option is used to allow the TV remote control to control certain functions of the Blu-ray Disc™ player; and for the Blu-ray Disc™ player to control certain functions of the TV.

On: Allow mutual control of devices through HDMI. Off: Do not allow CEC control.

Notes:

 Not all TVs are compatible with your Blu-ray Disc[™] plaver.

The default setting is Off. Select On if CEC control is necessary

Update Via Network:

This option displays the required storage space if the Blu-ray Disc™ player is connected to internet for upgrade. For detailed upgrade operation, please refer to "Upgrading Your Player's Firmware" on next page.

Restore factory defaults:

Choose one of the options, then press \mathbf{OK} to pop up a dialog box, choose \mathbf{Ok} in the box, and then press \mathbf{OK} to confirm.

To apply the deactivation, please plug off the player after operating deactivation.

Actions	Response
Restore factory settings and deactivate all connected applications	All settings (including Parental Password) will be restored to the factory defaults and all connected applications will be deactivated.
Restore factory settings	Restores all settings (including Parental Password) to the factory defaults.
Deactivate all connected applications	Deactivates all connected applications
Deactivate Netflix	Deactivates the connected Netflix application
Deactivate YouTube	Deactivates the connected YouTube application
Deactivate VUDU	Deactivates the connected VUDU application
Deactivate Pandora	Deactivates the connected Pandora application
Deactivate Picasa	Deactivates the connected Picasa application
Deactivate Blockbuster	Deactivates the connected Blockbuster application
Deactivate CinemaNow	Deactivates the connected CinemaNow application

Upgrading Your Player's Firmware

This player needs to stay up to date to make sure that you have the latest features available. This is done with a software update. You may periodically see a screen that prompts you to update your firmware. It is highly recommended that you apply all updates available to enhance and enjoy product features.

Automatic updates over the Internet

- 1. Make sure that your player is successfully connected to the Internet. If new firmware is available, you will see a message prompting you to update your firmware. Follow the directions in the update program to complete the firmware update procedure for the player
- Use ► / ◄ to highlight "OK", and then press OK. The software will begin downloading, and a status bar will appear on the TV screen.
- After the firmware update has completed successfully, a message will appear indicating the player will automatically turn itself off and restart.

Note: Never turn off the player during a firmware update process. Let the firmware update process finish.

Toshiba America Information Systems, Inc. will not be responsible for damage or malfunction caused to the player by an unstable internet connection or consumer negligence during firmware updates.

Network Connection Setting

- Press ▼ / ▲ to select Network in stop mode, then press
 ▶ button,
- If no Ethernet cable is connected to the ETHERNET jack on the back of your player, a screen similar to the following appears:

Wireless
Network List
WiFi Protected Setup (WPS)
Manual
IP Settings

For detailed operations, refer to the "Configuring a wireless Internet connection".

II. If a wired connection is made to your player, a screen similar to the following appears:

Link Status	► Link up
MAC Address	00:23:18:75:b1:2b
IP Mode	 Dynamic
IP Address	128.60.3.31
Subnet Mask	255.255.0.0
Gateway	128.60.1.1
Primary DNS	128.60.1.41
Secondary DNS	128.60.1.42

Refer to the "Configuring a wired Internet connection" for details.

Note: "Wireless" and "Wired" are optional and do not appear at the same time. Normally, "Wireless" is shown without wired connection. While using a wired Internet connection, "Wireless" is disabled and "Wired" is activated.

Configuring a wired Internet connection

- Press V / ▲ to select Network in stop mode, then press
 ▶ button to enter the following screen:
 - If the network connection is active, **Link Up** appears next to Link Status. If the network connection is not active, **Link Down** displays next to Link Status.
- 2. Press \blacktriangledown / \blacktriangle to select IP Mode, then press OK.
- 3. Press \blacktriangledown / \blacktriangle to select an IP mode. You can select:
- Manual Lets you manually configure network settings, such as IP address, subnet mask, and gateway settings.
- Dynamic Uses DHCP to automatically obtain an IP address.

- 4. Press ♥ / ▲ / ► / ◀ to highlight Network Test, and press OK to test your network connection.
- 5. Press ◀ or **RETURN** to go to the previous menu.

Configuring a wireless Internet connection

This section describes how to configure the Blu-ray Disc[™] player for accessing the internet via a WiFi connection. The procedure for connecting to a wireless network depends on various network parameters. Read the following configuration methods to determine which instructions to use to connect to your network.

- I. Connection to the wireless Network which you select
 - a. Connecting to an <u>Unencrypted</u> Wireless Network b. Connecting to an <u>Encrypted</u> Wireless Network
- II. Connection to the wireless Network using Wi-Fi
- Protected Setup (WPS) a. Connecting to a Wireless Network Using WPS
- Pushbutton b. Connecting to a Wireless Network Using WPS PIN
- III.Connection to the wireless Network using Manual IP Configuration

Description of the Wireless Network List Display

Choosing "Network List" in the wireless network setup menu will cause a list of available WiFi networks to appear, as shown below:

1	Vetwo	ork L	ist		
WiFi 🛛	ull	Ø	Eſ	WiFi-me*][
WiFi 💷	-ull	ø	Ô	Panda	
WiFi			Ð	dlink_media	
WiFi 💽	$\ \ $	Ø	Ð	NTGR 11g	
WiFi 💽	$\ \ $		Ð	Airport_SN	

The symbols that might appear next to each listed wireless network in the network list are as follows:

Category	lcon	Definition
Connected	~	When the Blu-ray Disc™ player is turned on, it will connect to the wireless network displaying this symbol. Typically, this is the last wireless network connected before powering down.
	*	Indicates that the Blu-ray Disc [™] player is currently connected to this network.
Saved		The wireless network properties have been saved in the Blu-ray Disc [™] player's memory.
Wireless Security		The wireless network data is not encrypted.
	A	The wireless network data is encrypted; a 'security key' must be entered so that the Blu-ray Disc™ player can share data over the network.
	\bigcirc	The wireless network data is encrypted; the encryption scheme is not supported by the Blu-ray Disc™ player.
Wireless Protocol	а	The wireless network supports 802.11a
	b	The wireless network supports 802.11b
	g	The wireless network supports 802.11g
	n	The wireless network supports 802.11n
	0	The wireless router supports the WPS standard.
Signal Strength	ull	Strong Signal
	ull	Good Signal
	ull	Medium Signal
	ull	Weak Signal
	ull	No Signal

I. Connection to the wireless Network which you select



 In the "Wireless" menu, press V / ▲ to select Network List, then press OK. A list of existing wireless networks near the Blu-ray Disc™ player will appear (It may take several seconds for this list to be created). For example:

1	Network L	ist	
WiFi 🛛	ul Ø	E	WiFi-me*
WiFi Don	11 Ø	Ð	Panda
WiFi	ull –	Ð	dlink_media
WiFi 💽	$\ \ \mathcal{G}$	Ð	NTGR 11g
WiFi 💽	ul	Ð	Airport_SN

- Press ▼ / ▲ to select the desired wireless network, and press OK to confirm.
- a. If the Blu-ray Disc™ player is connected to an <u>Unencrypted</u> Wireless Network, a menu similar to the following will appear:

	WiFi-me	
Connect	WPS Pin	Cancel
/ Name and Pa	assword are case-se	insitive

- Press ◀ / ► to highlight Connect, and press OK. If the wireless network is functioning, (icon and a message "Connection to XXX...Success" will appear on the TV.
- Press OK to close the message. The Blu-ray Disc[™] player is now connected to the network. From now on, when you turn on the player, it will automatically connect to the network; there is no need to repeat these steps again.

Note: If you do not see this message, the Blu-ray Disc™ player was not able to connect to the network.

b. If the Blu-ray Disc™ player is connected to an <u>Encrypted</u> Wireless Network, a menu similar to the following will appear:

	WiFi-me
Password	1
	Connect WPS Pin Cancel
	Press ENTER to open keyboard
! Pass	vord is case-sensitive

- Press OK(ENTER) to activate the on-screen keyboard. Carefully enter the network password by using the V / ▲ / ◄ / ► to highlight the desired letter on the keyboard, and then pressing OK. (If you make a mistake, use the backspace a key to erase the mistake.)
- Use ▼ / ▲ / ◄ / ► to highlight Done on the upper-right corner of the keyboard, and press OK to remove the keyboard from the screen.

Done 1 2 3 4 5 6 7 8 9 0
🖾 q w e r t y u i o p
→ a s d f g h j k l ;
z x c v b n m , . /
Space () - = () []] ()

- Use ▼ to highlight Connect, and press OK. If the wireless network is functioning, (con and a message "Connection to XXX...Success" will appear on the TV.
- Press OK to close the message. The Blu-ray Disc[™] player is now connected to the network. From now on, when you turn on the player, it will automatically connect to the network; there is no need to repeat these steps again.

Notes:

- If you do not see this message, the Blu-ray Disc[™] player was not able to connect to the network.
- If the wireless network is encrypted using an unsupported encryption (it appears in the network list with an icon), you cannot connect to the network. You must change the router's encryption type before proceeding.
- II. Connection to the wireless Network using Wi-Fi protected Setup(WPS)
- Press ▼ / ▲ to select Network in stop mode, then press
 ▶ button to enter the following screen:



a. If the Blu-ray Disc™ player is connected to a Wireless Network Using WPS Pushbutton:

 Press ▼ / ▲ to select WiFi Protected Setup (WPS), then press OK.



- 3. Press the WPS button on the top of your router.
- Once you see "Success" on the button at the bottom of the screen, the Blu-ray Disc[™] player is connected to the router.

Note: If you do not see this message, the Blu-ray Disc[™] player was not able to connect to the network. Repeat steps 1-4 again.

- b. If the Blu-ray Disc[™] player is connected to a Wireless Network Using WPS PIN:
- Press ▼ / ▲ to select Network List, then press OK. A list of existing wireless networks near the Blu-ray Disc[™] player will appear (It may take several seconds for this list to be created).
- 3. Press ▼ / ▲ to select the desired wireless network, and press OK to confirm.
- 4. Press ► / ◄ to highlight WPS PIN, and press OK. The following screen will appear:



- Press ► / ◄ to highlight connection method you desire, and press OK.
- 6. Follow the on-screen message to continue operating the connection.
- III. Connection to the wireless Network using Manual IP Configuration
- 1. In the "Wireless" menu, press ▼ / ▲ to select Manual, then press OK.
- 2. Follow the on-screen message to continue operating the connection.

Using the Connected Applications

Some models are equipped with the capability to watch movies over the internet.

Watching Movies with BLOCKBUSTER®

This Blu-ray Disc[™] Player enables you to use the following services provided by Blockbuster.

- 1. In Home Menu, press ▲ / ▼ to select Connected.
- 2. Press ▶, then press ▲/▼ to highlight Blockbuster, and then press OK to enter Blockbuster main menu.
 - Movies : Display movies.
 - TV Shows : Display TV Shows.
 - Find : Search for a desired movie or TV show by entering it manually.
 - My Library : Display a title that you bought or rented.
 - **My Favorites** : Display a title that has been added to My Favorites.
 - **Configure :** Activate or deactivate the Blu-ray Disc[™] Player.
 - Help : Get customer service contact information and check the current software version.
 - 3. If you don't have a Blockbuster account yet, visit www.blockbuster.com to create your account.
- 4. Use ▼ / ▲ / ► / ◀ to select the **Configure**, then press OK
- Use the number buttons on the remote control to enter the activation code that is created by the web site, then use
 the highlight Activate, and press OK to confirm.

 When the Blu-ray Disc[™] Player is activated, you will move to the Home page.
- 6. Press ► / ◄ to select the Movies or TV Shows, then press OK.
- 7. Press $\nabla/ A / P / \blacktriangleleft$ to select the desired title, then press OK.
- 8. Press ► / ◀ to select the **Rent** or **Buy**, then press OK.
- Press ► / ◄ to select the Submit Order, then press OK. If you want to play any of the titles that your bought, simply click Play Now.
- 10.Press ◀ to go to the previous menu.

Watching Movies with CinemaNow®

This Blu-ray Disc[™] Player enables you to use the following services provided by CinemaNow.

- 1. In Home Menu, press \blacktriangle / \blacktriangledown to select **Connected**.
- 2. Press ►, then press ▲ / ▼ to highlight CinemaNow, and then press OK to enter CinemaNow main menu.
 - Movies : Display movies.
 - TV Shows : Display TV Shows.
 - Search All : Search for a desired movie or TV show by entering it manually.
 - My Videos : Display a title that you bought or rented.
 - Wish List : Display a title that has been added to Wish List.
 - Settings : Activate or deactivate the Blu-ray Disc™ Player.
- Help: Get customer service contact information and check the current software version.
- 3. If you don't have a CinemaNow account yet, visit <u>www.</u> <u>cinemanow.com/bbactivate</u> to create your account.
- 4. Use $\bigvee / \land / \lor / \lor$ to select the **Settings**, then press OK.
- 5. Press the Activate.
- 6. Use the number buttons on the remote control to enter the activation code that is created by the web site, then use ▼ to highlight Activate, and press OK to confirm. When the Blu-ray Disc[™] Player is activated, you will move to the Home page.
- Press ► / ◄ to select the Movies or TV Shows, then press OK.
- Press ▼/▲/►/ ◄ to select the desired title, then press OK.
- 9. Press ► / ◄ to select the **Rent** or **Buy**, then press OK.
- 10.Press ► / ◄ to select the Submit Order, then press OK. If you want to play any of the titles that your bought, simply click Play Now.
- 11.Press ◀ to go to the previous menu.

Using the Connected Applications

Watching Movies with Netflix®

To use Netflix service, connect this player to your network, and make the network settings if they are not finished yet.

1. Launching Netflix movie

In Home Menu, press \blacktriangle / \forall to select Connected, then use >, and then press \blacktriangle / \forall to highlight "Netflix", and then press **OK** to enter.

2. Creating Netflix account If you are not a Netflix Member:

Select "no". Read the instructions displayed on the TV screen, and visit <u>http://www.netflix.com/toshiba</u> from your PC. Sign up to create your account, then select "I'm now a member".

Are you a member of Netflix?
yes 170

If you are a Netflix Member: Select "Yes".

3. Activating Netflix player

To play streaming video via Netflix service, Netflix player needs to be activated. Read the instructions displayed on the TV screen, and visit <u>http://www.netflix.com/activate</u> on your PC. Sign in to your Netflix account, if necessary. Enter the activation code displayed on the TV screen.



4. Preparing Instant Queue

To play streaming video via Netflix service, Netflix player needs to be activated. Read the instructions displayed on the TV screen, and visit <u>http://www.netflix.com/activate</u> on your PC. Sign in to your Netflix account, if necessary. Enter the activation code displayed on the TV screen.

Now you can view Netflix streaming video.

After having activated Netflix player and prepared Instant Queue, movies and TV episodes in your Instant Queue

appear on the TV screen. Select your desired one using the remote control of the player. You can control Netflix streaming video with the following keys of the remote control of this player:

	To start playing movie. To pause playback while in PLAY mode.	
	To stop playing and return to a list of movie titles.	
	To pause playing movie. To start playing while in PAUSE mode.	
•	To pause playing and open a list of scenes. Pressing further proceeds to the next scene.	
•	To pause playing and open a list of scenes. Pressing further proceeds to the previous scene.	
	To stop playing and return to a list of movie titles.	
••	To pause playing and open a list of scenes. Fast forward play starts.	
••	To pause playing and open a list of scenes. Fast reverse play starts.	
HOME MENU	To stop playing and return to Home Menu.	
ОК	To pause playing of Trick play screen while in PLAY mode. To start playing the movie in case of during Trick play screen.	

Note: Resolution of video streamed from Netflix varies depending on communication speed or bitrate of each content, etc.

Watching Movies with YouTube®

1. In Home Menu, press ▲ / ▼ to select Connected.

Press ▶, then press ▲ / ▼ to select connected.
 Press ▶, then press ▲ / ▼ to highlight YouTube, and then press OK to confirm.

3. Please enjoy any contents.

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Using the Connected Applications

Listening to Music with Pandora®

Using an existing Pandora account

- In Home Menu, press ▲ / ▼ to select Connected.
 Press ▶, then press ▲ / ▼ to highlight Pandora, and then press OK to confirm.
- then press OK to confirm.3. Select "I have a Pandora account" from the option list.
- 4. Sign in with your test account.

<u>Creating a new account on the Blu-ray Disc™</u> player

- 1. In Home Menu, press \blacktriangle / \blacktriangledown to select Connected.
- 2. Press ►, then press ▲ / ▼ to highlight Pandora, and then press OK to confirm.
- 3. Select "I am new to Pandora" from the option list.
- You will be given an activation code. Use this activation code to generate a new account and link it to the Blu-ray Disc[™] player using a PC.

Creating a new Pandora account on your PC

Go to <u>http://www.pandora.com/</u> to create a new account.

Watching Movies with VUDU™

Creating a Vudu account on your player

- 1. In Home Menu, press \blacktriangle / \blacktriangledown to select Connected.
- 2. Press ▶, then press ▲ / ▼ to highlight Vudu, and then press OK to confirm.
- 3. Follow the instructions to create an account, it will ask for an email address.
- Enter YOUR email address using the keyboard that appears on the screen. VUDU will then display a message on the TV "Sending you an email".

Creating a Vudu account on your PC

- 1. VUDU will send you an email with a hyperlink; click on the link.
- In the Vudu page that comes up on your PC's browser after clicking the link, enter the email and password of the owner of the account.
- 3. VUDU will then display a message "Enabling your device to view movies. The email message on your TV screen will disappear when done".
- 4. On your TV, you can now navigate to a Vudu movie, and 'buy' or 'rent' it.

Browsing Photos with Picasa®

Signing in with your account

To display photos in your web album on the screen, you need to sign in with your Picasa account.

- 1. In Home Menu, press \blacktriangle / \blacktriangledown to select **Connected**.
- Press ▶, then press ▲ / ▼ to highlight Picasa, and then press OK to confirm.
- 3. Enter your user name using the virtual keyboard, and press **OK** while [OK] is selected.
- Enter the password using the virtual keyboard, and press OK while [OK] is selected.
 Your web album is displayed on the screen.

Creating a new Picasa account on your PC

Go to <u>http://picasa.google.com/</u> to create a new account.

Troubleshooting & Maintenance

Troubleshooting

If the unit does not perform properly when operated as instructed in this manual, check the unit, consulting the following checklist.

Problem	Solution
No power	 Check if the AC cord is properly connected. Unplug the AC cord once, and wait for 5-10 seconds and then plug it in again.
No sound or picture	 Check if the connected TV is turned on. Check if the connections are made securely and correctly. Check whether the connected TV or other device supports HDCP. (This unit will not output a video signal unless the other device supports HDCP.) Check whether the output format of this unit (HDMI FORMAT) matches the supported input format of other connected device.
Distorted picture	 Sometimes a small amount of picture distortion may appear. This is not a malfunction. Connect this unit directly to the TV.
Completely distorted picture or black / white picture with Blu- ray Disc [™] / DVD	- Make sure the disc is compatible with this unit.
No sound or distorted sound	 Adjust the volume. Check if speakers are connected correctly. Check the HDMI connections. Check the settings in "Audio" menu.
Picture freezes momentarily during playback	 Check the disc for fingerprints / scratches and clean with a soft cloth wiping from center to edge. Clean the disc.
Disc cannot be played back	 Clean the disc. Ensure the disc label is facing up. Check if the disc is defective by trying another disc. Cancel the ratings control or change the control level. Insert a correct disc that can be played back on this unit.
No return to start-up screen when disc is removed	- Reset this unit by turning it off, then on again.
The unit does not respond to the remote control	 Aim the remote control directly at infrared sensor window on the front panel. Reduce the distance to infrared sensor window. Replace the batteries in the remote control. Re-insert the batteries with their polarities (+ / - signs) as indicated.
Buttons do not work or the unit stops responding	- To completely reset the unit, unplug the AC cord from the AC outlet for 5-10 seconds.
The unit does not respond to some operating commands during playback	- Operations may not be permitted by the disc. Refer to the instructions of the disc.

____ |³²

Troubleshooting & Maintenance

Problem	Solution
The unit cannot read Blu-ray Disc™ / DVD/ CD	 Dew condensation may form inside the unit. Do not use this unit for at least a few hours until its inside gets dry. Wipe the dirt off the disc or replace the disc.
Angle does not switch	 The angle cannot be switched for Blu-ray Disc[™] / DVD which do not contain multiple angles. In some cases multiple angles are only recorded for specific scenes.
Playback does not start when the title is selected	- Check the settings in "Parental" menu.
The password for rating level has been forgotten	 If you forget your password, reset your player to the factory defaults and your forgotten password will be cleared. For more information, see "Restore factory defaults" on page 25.
Cannot connect to the network	 Check if the LAN cable connection is properly made. Turn on the modem or broadband router. Check if the broadband router and/or modem is correctly connected. Check the "Network Connection Setting".
Cannot connect to the network while my PC is connected to the network	 Check the content of your Internet service contract to see if your Internet service provider prevents multiple terminals connecting at the same time.
Cannot use the BD-Live™ function	- Use a USB flash drive with enough space.

Notes:

- Some functions are not available in specific modes, but this is not a malfunction. Read the description in this manual for details on correct operations.
- · Some functions are prohibited on some discs.

Maintenance

Servicing

- Please refer to relevant topics on "Troubleshooting & Maintenance" before returning the product.
 If this unit becomes inoperative, do not try to correct the problem by yourself. There are no user-serviceable parts inside. Turn off, unplug the power plug, and please call our helpline to locate an Authorized Service Center.

Cleaning the cabinet

 Never use a solvent, thinner, benzene or alcohol to clean the unit. Do not spray insecticide liquid near the unit. Such chemicals may discolor the surface or damage the unit.

Cleaning discs

- When a disc becomes dirty, clean it with a cleaning cloth. Wipe the disc from the center to out. Do not wipe in a circular motion.
- · Do not use solvents such as benzine, thinner, commercially available cleaners, detergent, abrasive cleaning agents or antistatic spray intended for analog records.

Cleaning the disc lens

If this unit still does not perform properly although you refer to the relevant sections and "Troubleshooting" in this manual, the laser optical pickup unit may be dirty. Consult your dealer or an Authorized Service Center for inspection and cleaning of the laser optical pickup unit.

Disc handling

- Handle the discs so that fingerprints and dust do not adhere to the surfaces of the discs.
 Always store the disc in its protective case when it is not used.
- Note that discs with special shapes (heart-shaped discs, octagonal discs, etc.) cannot be played back on this unit. Do not attempt to playback such discs, as they may damage the unit. .

IR signal check

If the remote control is not working properly, you can use a digital camera (including a cellular phone with built-in camera) to see if it is sending out an infrared signal.

Glossary

Analog Audio

An electrical signal that directly represents sound. Compare this to digital audio which can be an electrical signal, but is an indirect representation of sound.

Aspect Ratio

The width of a TV screen relative to its height.

Conventional TVs are 4:3 (in other words, the TV screen is almost square); widescreen models are 16:9 (the TV screen is almost twice as wide as it is high).

AVCHD

AVCHD is a new format for high definition video camcorders which can record and play high-resolution HD images.

BD-Java

With some Blu-ray Disc[™] which support Java applications, you can enjoy the interactive functions such as games or interactive menus.

BD-Live™

BD-Live[™] is a BD-video (BD-ROM version 2 Profile 2.0/ Profile 1.1) which contains new functions (e.g. Internet connection), in addition to the BONUSVIEW[™] function.

Blu-ray Disc™ (BD)

Blu-ray Disc[™] is a next generation optical video disc which is capable of storing much more data than a conventional DVD is. The large capacity makes it possible to benefit from the features such as high-definition videos, multichannel surround sounds, interactive menus and so on.

Chapter

Just as a book is split up into several chapters, a title on a BD-video or DVD-video is usually divided into chapters.

Component Video Output

Each signal of luminance (Y) and component (P_g/C_g, P_g/C_R) is independent to output so that you can experience picture Color as it is. Also, due to compatibility with progressive video (525p/480p), you can experience higher-density picture than that in interlace (525i/480i).

Digital Audio

An indirect representation of sound by numbers. During recording, the sound is measured at discrete intervals (44,100 times a second for CD audio) by an analog-todigital converter, generating a stream of numbers. On playback, a digital-to-analog converter generates an analog signal based on these numbers.

DNS Server

A server which translates Internet domain names into IP addresses.

Dolby[®] Digital

The system to compress digital sound developed by Dolby Laboratories. It offers you sound of stereo (2ch) or multi-channel audio.

Dolby[®] Digital Plus

Dolby Digital Plus is the next generation digital audio compression technology developed as an extension to Dolby Digital. Blu-ray Disc supports 7.1 multi-channel surround sound output.

Dolby[®] TrueHD

Dolby TrueHD is a lossless coding technology developed for next generation optical discs. Blu-ray Disc supports 7.1 multi-channel surround sound output.

<u>DTS</u>®

DTS is a multi-channel surround sound system. By connecting to DTS decoder, you can enjoy movie dynamic and realistic sound like movie theater. DTS surround sound technologies were developed by DTS, Inc.

DTS-HD®

DTS-HD is a lossless coding technology developed as an extension of the original DTS Coherent Acoustics format. Blu-ray Disc supports 7.1 multi-channel surround sound output.

Gateway

IP Address of the electronic devices (such as router) which provide Internet access.

HDMI (High-Definition Multimedia Interface)

A digital interface between audio and video source. It can transmit component video, audio, and control signal with one cable connection.

<u>Hub</u>

A device used for connecting multiple device to the network.

IP Address

A set of numbers which are assigned to devices participating in a computer network.

JPEG (Joint Photographic Experts Group)

JPEG is a method of compressing still picture files. You can copy JPEG files on BD-RE/-R, DVD-RW/-R or CD-RW/-R from a computer and play back the files in this unit.

LAN (Local Area Network)

A group of computer networks covering a small area like a company, school or home.

Local Storage

A storage area of sub contents for playing virtual packages on BD-video.

MP3 (MPEG audio layer 3)

MP3 is a method of compressing files. You can copy MP3 files on BD-RE/-R, DVD-RW/-R or CD-RW/-R from the computer and play back the files on this unit.

Glossary

PCM (Pulse Code Modulation)

The most common system of encoding digital audio, found on CD and DAT. Excellent quality that requires a lot of data compared to formats such as Dolby Digital and MPEG audio. For compatibility with digital audio recorders (CD, MD and DAT) and AV amplifiers with digital inputs, this unit can convert Dolby Digital, DTS, and MPEG audio to PCM.

Proxy Server

Proxy server is a server which acts as an intermediary between a workstation user and the Internet to ensure security.

Region Code

Regions associate discs and players with particular areas of the world. This unit will only play back discs that have compatible region codes. You can find the region code of your unit by looking on the rear panel. Some discs are compatible with more than one region (or all regions).

Router

A networking device which distinguishes the IP address assigned to each device and routing and forwarding information in the computer network.

Sampling Frequency

Specifications

The rate which sound is measured by a specified interval to turn into digital audio data. The numbers of sampling in one second defines as sampling frequency. The higher the rate, the better the sound quality.

Subnet Mask

A mask which is used to determine what subnet an IP address belongs to.

<u>Title</u>

A collection of chapters on BD-video or DVD-video.

Track

Audio CD use tracks to divide up the content of a disc. The BD-video or DVD-video equivalent is called a chapter. See also "Chapter".

Virtual Package

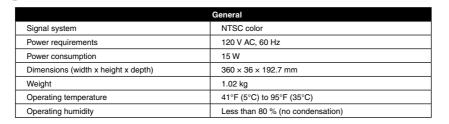
The function which copies data to other media (local storage) from the Internet and play the secondary video, secondary audio and the subtitle at the same time. The method of the playback varies depending on discs.

Windows Media™ Audio

Windows Media[™] Audio is the audio compressing technology developed by Microsoft. You can copy Windows Media[™] Audio files on BD-RE/-R, DVD-RW/-R or CD-RW/-R from a computer and play them back on this unit.

x.v.Color

"x.v.Color" is a promotion name given to the products that have the capability to realize a wide color space based on the xvYCC specifications and is a trademark of Sony Corporation.



	Terminals				
	HDMI output HDMI jack x 1	Video: 480i, 480p, 720p, 1080i, 1080p, 1080p/24F / Audio			
Rear	Audio output (Coaxial digital) RCA jack x 1	0.5 Vp-p (75 Ω)			
	USB terminal x 1	5V 500mA			
	LAN terminal	100BASE-T			

Note:

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pata_platform.ko	GPL	agetty	GPL2.0	nice	GPL2.0	
scsi_wait_scan.ko	GPL	awk	GPL2.0	od	GPL2.0	
Badblocks	GPL2.0	cat	GPL2.0	pivot_root	GPL2.0	
compile_et	GPL2.0	chgrp	GPL2.0	printenv	GPL2.0	
e2fsck	GPL2.0	chmod	GPL2.0	printf	GPL2.0	
flash_erase	GPL2.0	chown	GPL2.0	pwd	GPL2.0	
flash_eraseall	GPL2.0	chroot	GPL2.0	readlink	GPL2.0	
flash_info	GPL2.0	cmp	GPL2.0	reboot	GPL2.0	
fsck	GPL2.0	ср	GPL2.0	renice	GPL2.0	
geneccerror	GPL2.0	cut	GPL2.0	rmdir	GPL2.0	
- hdparm	GPL2.0	date	GPL2.0	rm	GPL2.0	
hotplog	GPL2.0	dd	GPL2.0	rmmod	GPL2.0	
libcom_err	GPL2.0	df	GPL2.0	samba	GPL2.0	
libe2p	GPL2.0	diff3	GPL2.0	sdiff	GPL2.0	
libext2fs	GPL2.0	diff	GPL2.0	sed	GPL2.0	
libgcc_s	GPL2.0	dirname	GPL2.0	seq	GPL2.0	
libnandutils	GPL2.0	dmesg	GPL2.0	simpleinit	GPL2.0	
libproc	GPL2.0	du	GPL2.0	sleep	GPL2.0	
nanddump	GPL2.0	echo	GPL2.0	sort	GPL2.0	
nandwrite	GPL2.0 GPL2.0	egrep	GPL2.0	stty	GPL2.0	
		env	GPL2.0	swapoff	GPL2.0	
netstat	GPL2.0	expr	GPL2.0	swapon	GPL2.0	
ntpdate	GPL2.0	false	GPL2.0	sync	GPL2.0	
top	GPL2.0	fgrep	GPL2.0	syslogd	GPL2.0	
tune2fs	GPL2.0	find	GPL2.0	tail	GPL2.0	
ubiattach	GPL2.0	free	GPL2.0	tar	GPL2.0	
ubicrc32	GPL2.0	gawk	GPL2.0	tee	GPL2.0	
ubidetach	GPL2.0	grep	GPL2.0	touch	GPL2.0	
ubiformat	GPL2.0	gunzip	GPL2.0	tr	GPL2.0	
ubimkvol	GPL2.0	gzexe	GPL2.0	true	GPL2.0	
ubinfo	GPL2.0	gzip	GPL2.0	tty	GPL2.0	
ubinize	GPL2.0	head	GPL2.0	umount	GPL2.0	
ubirename	GPL2.0	hexdump	GPL2.0	unnamed	GPL2.0	
ubirmvol	GPL2.0	hostname	GPL2.0	uniq	GPL2.0	
ubiupdatevol	GPL2.0	id	GPL2.0	unzip	GPL2.0	
vmstat	GPL2.0	install	GPL2.0	wc	GPL2.0	
libusb-config	GPL2.1	kill	GPL2.0	which	GPL2.0	
libusbpp	GPL2.1	klogd	GPL2.0	whoami	GPL2.0	
libuuid	GPL2.1	In	GPL2.0	xargs	GPL2.0	
Tip	Unique license	logger	GPL2.0	yes	GPL2.0	
Unzip	GPL2.0	login	GPL2.0	zcat	GPL2.0	
brcm_wifi.hotplug	GPL2.0	ls	GPL2.0	zcmp	GPL2.0	
hostname	GPL2.0	Ismod	GPL2.0	zdiff	GPL2.0	
libss	GPL2.0	Izo	GPL2.0	zforce	GPL2.0	
libstdc++	GPL2.0	md5sum	GPL2.0	zgrep	GPL2.0	
mk_cmds	GPL2.0	mkdir	GPL2.0	zmore	GPL2.0	
nke2fs	GPL2.0	mknod	GPL2.0	znew	GPL2.0	
mklost+found	GPL2.0	mkswap	GPL2.0			
mount.hotplug	GPL2.0	modprobe	GPL2.0			
mtdinfo	GPL2.0	more	GPL2.0			
nandsim.ko	GPL2.0	mount	GPL2.0			
tftpd	GPL2.0	mv	GPL2.0			

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Parts of this software have been adapted from the libpng package. Although this library supports all features from the PNG specification (as MNG descends from it) it does not require the libpng package. It does require the zlib library and optionally the JJG jpeg library, and/or the "little-cms" library by Marti Maria (depending on the inclusion of support for JNG and Full-Color-Management respectively.

This library's function is primarily to read and display MNG animations. It is not meant as a full-featured image-editing component! It does however offer creation and editing functionality at the chunk level. (future modifications may include some more support for creation and or editing)

*/

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2006-Jan-27

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--- end of FTL.TXT ---

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c. Curl/ 7.12.2

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d. C-ARES 1.6.0

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e. Openssl 0.9.5a

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